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Data Descriptions

Title

University of California, Santa Barbara Natural History Collections on GBIF — Data Description

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CHEADLE CENTER FOR BIODIVERSITY AND ECOLOGICAL RESTORATION
UNIVERSITY OF CALIFORNIA, SANTA BARBARA
HARDER SOUTH, BUILDING 578
updated 17 Sep 2025



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**Cheadle Center for Biodiversity
& Ecological Restoration**

UCSB NATURAL HISTORY COLLECTIONS ON GBIF — DATA DESCRIPTION (UPDATED 17 SEP 2025)

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ABSTRACT

The UCSB Natural History Collections (Cheadle Center) mobilize specimen and observation data for plants, algae, lichens, invertebrates, and vertebrates via GBIF. Datasets are published through community portals (CCH2, Macroalgae, Lichen Consortium), Symbiota/Ecdysis, and VertNet, and are standardized to Darwin Core with GBIF processing (normalization, taxonomic matching, and issue flagging). Collectively, these resources emphasize Southern California and the northern Channel Islands, with records spanning from the 1880s to the present. Data downloads are available via the GBIF portal <https://www.gbif.org/publisher/cae7b6c7-669a-4261-9a34-6e8cdc16a125>.

DATASETS (WITH DOIs)

- UCSB Herbarium (UCSB): vascular plants (plus historic slide/spirit collections). DOI: 10.15468/qpxmw0. Published through CCH2.
- UCSB Algae Collection (UCSB-A): marine macroalgae, specimens dating to the 1880s. DOI: 10.15468/xkt6kt. Published through Macroalgae.org.
- UCSB Lichen Collection (UCSB-L): lichens. DOI: 10.15468/mggbui. Published through the Consortium of Lichen Herbaria.
- UCSB Invertebrate Zoology Collection (UCSB-IZC): arthropods with emphasis on Hymenoptera (bees). DOI: 10.15468/w6hvhv. Published via Ecdysis (Symbiota Support Hub); license CC0 1.0.
- Cheadle Center Ornithology Collection: birds. DOI: 10.15468/conul6. (VertNet-backed).
- Cheadle Center Mammalogy Collection: mammals. DOI: 10.15468/uvoxek. (VertNet-backed).
- Cheadle Center Herpetology Collection: amphibians & reptiles; regionally focused. DOI: 10.15468/aujutz; license CC0 1.0.



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Note: Please consult each dataset's GBIF page for the current license and contacts; some licenses (e.g., CC0 vs. CC BY) differ by dataset.

GEOGRAPHIC & TEMPORAL COVERAGE

- Geographic focus: Southern California and the northern Channel Islands, with additional North American and international coverage varying by collection.
- Temporal span: Late 19th century to present (e.g., algae from the 1880s; herpetology 1950s–current).
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METHODS (DIGITIZATION & PUBLICATION WORKFLOW)

Data originate from UCSB's collections databases and community portals:

- Plants: CCH2 (Consortium of California Herbaria).
- Algae: Macroalgae.org portal.
- Lichens: Consortium of Lichen Herbaria.
- Invertebrates: Symbiota/Ecdysis (Symbiota Support Hub).
- Vertebrates: VertNet-backed datasets (Ornithology, Mammalogy, Herpetology).

All datasets are exported as Darwin Core Archives and registered with GBIF. GBIF processing performs normalization to Darwin Core, taxonomic matching against the GBIF Backbone, and applies data-quality flags ("Issues") visible on dataset pages.

DATA QUALITY & KNOWN LIMITATIONS

- Taxonomy & name matching: Names are interpreted against the GBIF Backbone; users should review GBIF "Issues" flags and compare verbatim vs. interpreted views when needed.
- Georeferencing: Spatial precision varies by record and historical period; review coordinate uncertainty and locality notes per record.
- Temporal completeness: Coverage is uneven across decades and taxa (e.g., earliest algae vs. later vertebrate accessions).
- Gridded data (if present): IZC may be flagged as containing gridded data; see GBIF's guidance on gridded datasets.

USAGE NOTES & CITATION

- Cite datasets directly using the DOI shown above or the recommended GBIF citation block on each dataset page (preferred for reproducibility).
- License compliance: Respect the license listed on the GBIF page for each dataset (e.g., CC0 1.0 for IZC and Herpetology).
- How to cite GBIF-mediated data: Follow GBIF citation guidelines.



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CONTACTS

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See Contacts on each dataset page for collection-specific curators/managers at
<https://ccber.ucsb.edu/collections-biodiversity/collections-biodiversity-overview>



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